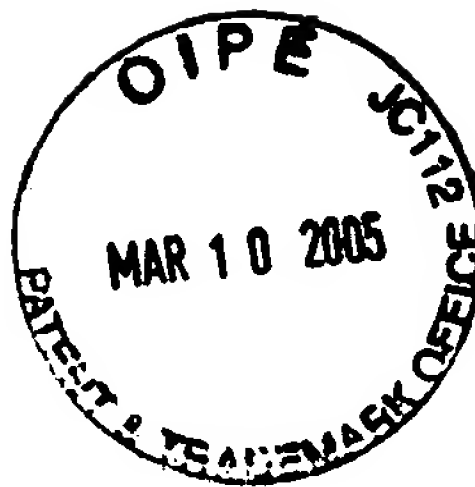


**APPEAL BRIEF UNDER 37 C.F.R. 41.37(c)**

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Appeal Brief Under 37 CFR 41.37

Serial No.: 09/579,918

Filed: May 26, 2000

Title: SYSTEM AND METHOD FOR RAIL TRANSPORT OF TRAILERS

Page 1 of 37  
Docket No.: 1126.001US1

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Douglas J. Miller et al.

Examiner: Andrew J. Fischer

Serial No.: 09/579,918

Group Art Unit: 3627

Filed: May 26, 2000

Docket: 1126.001US1

For: SYSTEM AND METHOD FOR RAIL TRANSPORT OF TRAILERS

**APPEAL BRIEF UNDER 37 C.F.R. 41.37**

Mail Stop Appeal Brief- Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Brief is presented in support of the Notice of Appeal mailed November 3, 2004, from the final rejection of claims 1-10, 12-22, and 25-28 of the above-identified application, as set forth in the Final Office Action mailed May 5, 2004. A copy of the claims being appealed is enclosed as Appendix I.

**Our check in the amount of \$250.00 is enclosed which represents the requisite fee set forth in 37 C.F.R. § 41.2(b)(2).**

Appellants respectfully request consideration and reversal of the Examiner's rejections of pending claims 1-10, 12-22, and 25-28.

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### **1. REAL PARTY IN INTEREST**

The Real Party in Interest of the above-captioned patent application is Canadian Pacific Railroad, the assignee of the application.

Appeal Brief Under 37 CFR 41.37

Serial No.: 09/579,918

Filed: May 26, 2000

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## **2. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences for the above-referenced patent application.

### **3. STATUS OF CLAIMS**

The present application was filed on May 26, 2000 with claims 1-24. A Restriction Requirement was mailed May 20, 2003. In response thereto, Applicants elected Group I, which includes claims 1-10 and 12-22. Claims 11, 23, and 24 were canceled without prejudice. A non-final Office Action was mailed September 10, 2003. In a response mailed February 10, 2004, Applicants amended claim 5, and added new claims 25-28. A Final Office Action was mailed May 5, 2005. Therefore, claims 1-10, 12-22, and 25-28 (Appendix I, Claims) remain pending in this application and are the subject of the present appeal.

Claims 1, 4-9, and 12-22 stand rejected under 35 U.S.C. §102(e).

Claims 2, 3, and 10 stand rejected under 35 U.S.C. §103(a).

Claims 25-28 stand twice rejected, under 35 U.S.C. §112, 2<sup>nd</sup> paragraph, and under 35 U.S.C. §102(e).

**Appeal Brief Under 37 CFR 41.37**

Serial No.: 09/579,918

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#### **4. STATUS OF AMENDMENTS**

Appellants have not filed an amendment subsequent to the mailing of the Final Office

Action on May 5, 2004.

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## **5. SUMMARY OF CLAIMED SUBJECT MATTER**

According to one embodiment, the present invention relates to a trailer transport system for tracking trains having a plurality of rail cars, each of which can transport a trailer. See page 7, lines 1-4; see Figure 1. The system includes a computer system (see page 7, lines 4-9; Figure 1, reference numeral 12) having a trailer tracking program (Id; Figure 1, reference numeral 26). The trailer tracking program receives information regarding a trailer to be transported (Id) and stores the information in a record (Id). The system also includes a plurality of terminals (see page 7, line 2; Figure 1, reference numerals 14.1 and 14.2). Each terminal includes a terminal management system (See page 7, lines 8-10; Figure 1, reference numeral 18) communicatively connected to the computer system. The terminal management system pulls up the record corresponding to the trailer to be transported when the trailer arrives at the terminal, and modifies the record to reflect the trailer's transportation status (See page 7, lines 8-10).

According to another embodiment, the present invention relates to a trailer transport system having a computer system (see page 7, lines 1-2; Figure 1, reference numeral 12) and a plurality of terminals (see page 7, lines 1-2; Figure 1, reference numerals 14.1 and 14.2). The system includes a network (see page 11, lines 1-15; Figure 4, reference numeral 60). A computer system is communicatively coupled to the network. The computer system includes a data storage system (see page 7, lines 4-10; Figure 1, reference numeral 24) used to store information identifying the trailer. The system also includes a first terminal management system (see page 7, lines 1-9; Figure 1, reference numeral 18) associated with a first terminal. The first terminal

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management system is communicatively coupled to the network, and communicates through the network to the computer system. (See page 11, lines 1-15). The system also includes a second terminal management system (see page 7, lines 1-9; Figure 1, reference numeral 18) associated with a second terminal. The second terminal management system is communicatively coupled to the network, and communicates through the network to the computer system. (See page 11, lines 1-15). Each terminal management system tracks arrivals and departures of trailers from the terminal and modifies the information stored in the data storage system as a function of the arrivals and departures. (See page 7, lines 7-9).

According to another embodiment, the present invention relates to a trailer transport system having a computer system (see page 7, lines 1-2; Figure 1, reference numeral 12) and a plurality of terminals (see page 7, lines 1-2; Figure 1, reference numerals 14.1 and 14.2). The system includes a network. (See page 11, lines 1-15; Figure 4, reference numeral 60). A computer system is communicatively coupled to the network. The computer system includes a data storage system (see page 7, lines 4-10; Figure 1, reference numeral 24) used to store information identifying the trailer. The system also includes a first access restriction system (page 12, lines 18-22; Figure 5, reference numerals 88 and 90, jointly) associated with a first terminal. The first access restriction system is communicatively coupled to the network, and communicates through the network to the computer system. (See page 11, lines 1-15). The system also includes a second access restriction system (page 12, lines 18-22; Figure 5, reference numerals 88 and 90, jointly) associated with a second terminal. The second access restriction



system is communicatively coupled to the network, and communicates through the network to the computer system. (See page 11, lines 1-15). Each access restriction system tracks arrivals and departures of trailers from the terminal and modifies the information stored in the data storage system as a function of the arrivals and departures. (See page 7, lines 7-9).

According to another embodiment, the present invention relates to a terminal management system (see page 12, lines 1-6; Figure 7, reference numeral 18). The terminal management system includes a network interface (see page 12, lines 7-9 and 15-17; Figure 7, reference numeral 92) and a terminal management computer (see page 12, lines 23-26; Figure 8, reference numeral 108) coupled to the network interface. The terminal management computer includes a means for transferring information about trailers being transported through the network interface to a computer system (page 15, lines 31-34; Figure 8, reference numeral 108). The terminal management computer also includes a means for receiving information about trailers being transported from the computer system through the network interface (page 15, lines 31-34; Figure 8, reference numeral 108).

According to another embodiment, the present invention relates to a terminal management system (see page 12, lines 1-6; Figure 7, reference numeral 18). The terminal management system includes a network interface (see page 12, lines 7-9 and 15-17; Figure 7, reference numeral 92), and an access restriction system (page 12, lines 18-22; Figure 5, reference numerals 88 and 90, jointly). A terminal management computer (see page 12, lines 23-26; Figure 8, reference numeral 108) is coupled to the network interface and to the access restriction system.

The terminal management computer includes a means for transferring information about trailers being transported through the network interface to a computer system (page 15, lines 31-34; Figure 8, reference numeral 108). The terminal management computer also includes a means for receiving information about trailers being transported from the computer system through the network interface (page 15, lines 31-34; Figure 8, reference numeral 108).

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended claims and their legal equivalents for a complete statement of the invention.

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**6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

**Issue 1:**

Whether claims 1, 4-9, 12-22, and 25-28 have been erroneously rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,917,433 to *Keillor*.

**Issue 2:**

Whether claims 25-28 have been erroneously rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph.

**Issue 3:**

Whether claim 2 has been erroneously rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent No. 5,917,433 to *Keillor*, in view of WO 98/39192 (*Nijenhuis*).

**Issue 4:**

Whether claims 3 and 10 have been erroneously rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent No. 5,917,433 to *Keillor*, in view of Official Notice taken by the Examiner.

## **7. ARGUMENT**

### **A. The Law Applicable under 35 U.S.C. §102**

MPEP §2131 states the basic applicable law governing anticipation of claimed subject matter:

A claim is anticipated only if each and every element is found, either expressly or inherently described, in a single prior art reference.

### **B. Introduction**

Claims 1-10 and 12-15 each require an infringing system to include terminal management systems that possess tracking functionality, as discussed below. *Keillor* fails to teach or suggest such an element. Claims 16-22 require an infringing system to include access restriction systems, also possessing tracking functionality. Again, *Keillor* fails to recite or teach this element. Finally, claims 25-28 are directed toward the terminal management systems, themselves. As already mentioned, *Keillor* does not disclose this element. For at least this reason, claims 1-10, 12-22, and 25-28 are patentably distinct from *Keillor*.

### **C. Appellants' Invention**

Appellants' invention, as claimed in the present application, relates to a system for tracking trains. The system is especially suited for use in situations in which a train is used to transport truck trailers over short and medium haul corridors. In such a scenario, a truck enters a train terminal, and drops off its trailer. The trailer is carried by train to a destination terminal. A

The system includes a first terminal (identified by reference numeral 14.1) and a second terminal (identified by reference numeral 14.2). A main rail (identified by reference numeral 22), along which a train may travel, extends between the first and second terminals. Each terminal has a terminal management system (identified by reference numeral 18) that communicates with a computer system (identified by reference numeral 12). The computer system includes a trailer

tracking program (identified by reference numeral 26). The trailer tracking program receives information regarding a trailer and stores the information in a record within a data storage system (identified by reference numeral 24). Each terminal management system tracks arrivals and departures of trailers to and from its associated terminal. Further, each terminal management system modifies the information stored in the data storage system as a function of the arrivals and departures. Optionally, a terminal management system may include functionality for controlling entry to and exit from a terminal, as well as the aforementioned trailer tracking functionality. Such functionality, if provided, is referred to as an “access restriction system.”

While Appellants’ invention is complex and has many facets that are to be appreciated, its major components include a computer system (reference numeral 12) and a terminal management system (reference numeral 18) associated with each terminal. The specification makes clear that a terminal management system is a computing device that performs the aforementioned tracking functionality. See Application at page 7.

Claims 1-10 and 12-15 each require the aforementioned computer system, terminal management systems, and tracking functionality. With regard to the tracking functionality, claims 1-10 require each “terminal management system [to] pull[] up the record corresponding to the trailer to be transported when the trailer arrives at the terminal and [to] modif[y] the record to reflect the trailer’s transportation status.” Claims 12-15 require “each terminal management system [to] track[] arrivals and departures of trailers from the terminal and [to] modif[y] the information stored in the data storage system as a function of said arrivals and departures.”

Independent claim 16 is linguistically identical to independent claim 12 with one exception: the terminal management systems of claim 12 are recited as “access restriction systems” in claim 16. Just as in claim 12, claim 16 requires each access restriction system to “track[] arrivals and departures of trailers from the terminal and [to] modif[y] the information stored in the data storage system as a function of said arrivals and departures.”

Finally, claims 25-28 claim the terminal management systems, themselves.

**D. The Prior Art**

Claims 1, 4-9, 12-22, and 25-28 were rejected under 35 U.S.C. §102(e), as being anticipated by *Keillor*. Briefly, *Keillor* discloses a trailer tracking system that permits the location and status (e.g., temperature within trailer) of a trailer to be monitored at a central station. The major components of the system disclosed by *Keillor* are presented in Figure 2 (reproduced from Figure 1 of *Keillor*).

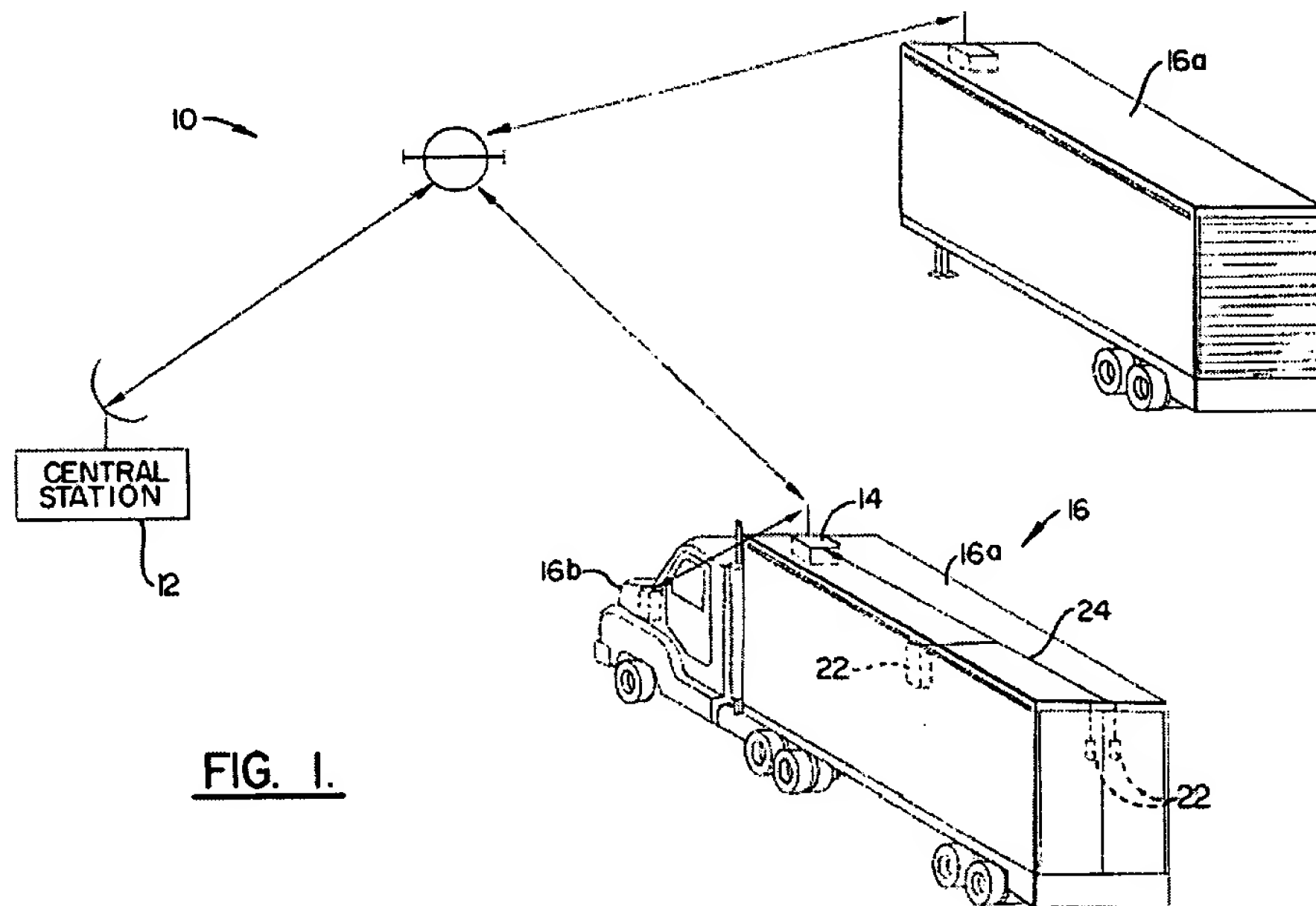


Figure 2

As can be seen from Figure 2, the system of Keillor includes a monitor (reference numeral 14) associated with each trailer (reference numeral 16a). The monitor is powered from the electrical system of the truck (reference numeral 16b), and includes an “energy storage reservoir” that can power the monitor during periods when the trailer is not coupled to the truck.

The monitor includes a sensor interface that allows for continuous tracking of the location and status of the trailer. For instance, the sensor interface may be coupled to a temperature sensor. Thus, the location and status (e.g., temperature) of the trailer is transmitted to a central station (reference numeral 12). For example, the monitor may be configured to alert the central



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station of the location and temperature of the trailer if the temperature crosses a threshold (e.g., the temperature of a refrigerated trailer rises above 32° F).

**E. Rebuttal of the Rejection of Claims 1, 4-9, 12-22, and 25-28 under 35 U.S.C. §102(e)**

**1. Claims 1, 4-9, and 12-15**

Claims 1, 4-9, and 12-15 cover systems having certain major components in common. Namely, these claims require “terminal management systems” to be associated with terminals at which trailers arrive and from which trailers depart. These claims also require a “computer system” which may communicate with the various terminal management systems. Finally, each of these claims require the terminal management systems to perform the above-described tracking function. Specifically, claims 1, and 4-9, require each “terminal management system [to] pull[] up the record corresponding to the trailer to be transported when the trailer arrives at the terminal and [to] modif[y] the record to reflect the trailer’s transportation status.” Claims 12-15 require “each terminal management system [to] track[] arrivals and departures of trailers from the terminal and [to] modif[y] the information stored in the data storage system as a function of said arrivals and departures.”

*Keillor* does not disclose a terminal management system at all. Instead, *Keillor* discloses a monitor that is attached to a given trailer. These claims, on the other hand, require terminal management systems associated with *individual terminals*.

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Notoriously absent from *Keillor* is any mention of a terminal management system “pull[ing] up a record corresponding to [a] trailer to be transported when the trailer arrives at the terminal” (independent claim 1) or “track[ing] arrivals and departures of trailers from a terminal” (independent claim 12). Since the monitors of *Keillor* are associated with trailers—not terminals—they neither pull up records when the trailer arrives at a terminal, nor track arrivals and departures of trailers from terminals. To expand upon these points, Appellants point out (with reference to independent claim 1) that the monitors of *Keillor* are not described as pulling up records at all. Instead, they transmit location and status information to the central station. With reference to independent claim 12, Appellants point out that even if the action of simply tracking the location of a trailer could be construed as tracking an arrival or departure to or from a terminal, the system of *Keillor* would still not satisfy the limitations of claim 12. Claim 12 requires a terminal management system to track arrivals and departures of “trailers” to and from a terminal. The term “trailers” is plural. Each monitor of *Keillor* resides on an individual trailer, meaning that it could—at best—monitor the arrival and departure of but a single trailer.

With regard to claims 1 and 4-9, the Examiner attempts to read out the limitation regarding “pull[ing] up a record corresponding to [a] trailer to be transported when the trailer arrives at the terminal.” The Examiner states that the phrase “when the trailer arrives at the terminal” renders the “pulling up” action optional, meaning that it has no limiting effect at all. Appellants are bewildered by this position. The phrase “when the trailer arrives at the terminal” describes when the “pulling up” action must occur. The claim language in no way makes this

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action optional. Put simply, the claim language means just what it says: that a terminal management system must pull up the record corresponding to a trailer when the trailer arrives at the terminal.

## **2. Claims 16-22**

Independent claim 16 is identical to independent claim 12 with one exception: the terminal management systems of claim 12 are recited as “access restriction systems” in claim 16. Therefore, claim 16 and its dependent claims 17-22 are patentably distinct from *Keillor* for the same reasons that claims 12-15 are. Specifically, *Keillor* fails to disclose an “access restriction system” associated with a terminal. Instead, *Keillor* teaches associating a monitor with a trailer. Moreover, *Keillor* does not teach an access restriction system that “tracks arrivals and departures of trailers from [a] terminal.” Appellants again point out that the term “trailers” is plural, meaning that even if the monitor of *Keillor* could be thought of as an “access restriction system,” it would not satisfy the tracking limitation found in claims 16-22. As previously stated, each monitor of *Keillor* resides on an individual trailer, meaning that it could—at best—monitor the arrival and departure of but a single trailer.

Appellants further point out that the monitor of *Keillor* does not control entry to and from a terminal (see Application at page 19, lines 3-6), and cannot be thought of as teaching an “access control system.”

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### 3. Claims 25-28

Each of claims 25-28 requires a “terminal management computer.” As stated previously, a terminal management computer is described as being a part of a terminal. See Application at page 7, lines 2-4 (“*Each terminal 14 includes a trailer transit area 16, a terminal management system 18 and a loading track 20 connected to a main rail 22.*”) (Emphasis added). *Keillor* fails to disclose any form of computer being associated with a terminal—it teaches a computing device (i.e., a monitor) associated with a trailer.

Appellants further point out that claims 26-28 require an access restriction system. For reasons already discussed, *Keillor* does not disclose an access restriction system.

### F. Summary of Rebuttal to Rejections under 35 U.S.C. §102(e)

Claims 1-10 and 12-15 each require an infringing system to include terminal management systems that possess tracking functionality. *Keillor* fails to teach or suggest a terminal management system, let alone a terminal management system possessing the required tracking functionality. Claims 16-22 require an infringing system to include access restriction systems, also possessing tracking functionality. Again, *Keillor* fails to teach an access restriction system, let alone an access restriction system possessing the required tracking functionality. Finally, claims 25-28 are directed toward the terminal management systems, themselves. As already mentioned, *Keillor* does not disclose a terminal management system at all. For at least this reason, claims 1-10, 12-22, and 25-28 are patentably distinct from *Keillor*.

**G. The Law Under 35 U.S.C. §112, 2<sup>nd</sup> Paragraph, As It Pertains To Means-Plus-Function Elements**

MPEP §2181 states the basic applicable law governing compliance with 35 U.S.C. §112, 2<sup>nd</sup> paragraph, as it pertains to means-plus-function elements:

If the corresponding structure, material or acts are described in the specification in specific terms (e.g., an emitter-coupled voltage comparator) and one skilled in the art could identify the structure, material or acts from that description, then the requirements of 35 U.S.C. §112, second and sixth paragraphs are satisfied.

**H. Rebuttal of Rejection of Claims 25-28 Under 35 U.S.C. §112, 2<sup>nd</sup> Paragraph**

Claims 25-28 were rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph. Each of the aforementioned claims includes two means-plus-function elements: (1) “means for transferring information . . . through the network interface”; and (2) “means for receiving information . . . through the network interface.” According to the Examiner, it is unclear what structure corresponds to the recited functions. Therefore, the Examiner rejected these claims under 35 U.S.C. §112, 2<sup>nd</sup> paragraph.

This rejection is in error, because one skilled in the art could easily identify the structure corresponding to the recited functions. Appellants advance the following arguments. One of ordinary skill in the art understands that a device driver<sup>1</sup> is the structure that corresponds to the recited function of transferring/receiving information through the network interface. One of

ordinary skill in the art also understands that device drivers are contained in the operating system.

See COMPUTER DESKTOP ENCYCLOPEDIA, 9<sup>th</sup> Edition, 2001, p. 705 (“The software routine that knows how to deal with each device is called a ‘driver.’ The operating system contains all the drivers for peripherals attached to the computer.”) (from the definition of the term “operating system”). Therefore, one of ordinary skill in the art would understand an operating system as containing sufficient structure to accomplish the recited functions.

Figure 8 of the present application depicts one example of a network environment including a terminal management system. Figure 8 (reproduced as Figure 3 herein) is presented below.

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<sup>1</sup> A device driver is a program that allows an application to communicate with a peripheral device (such as a network interface).

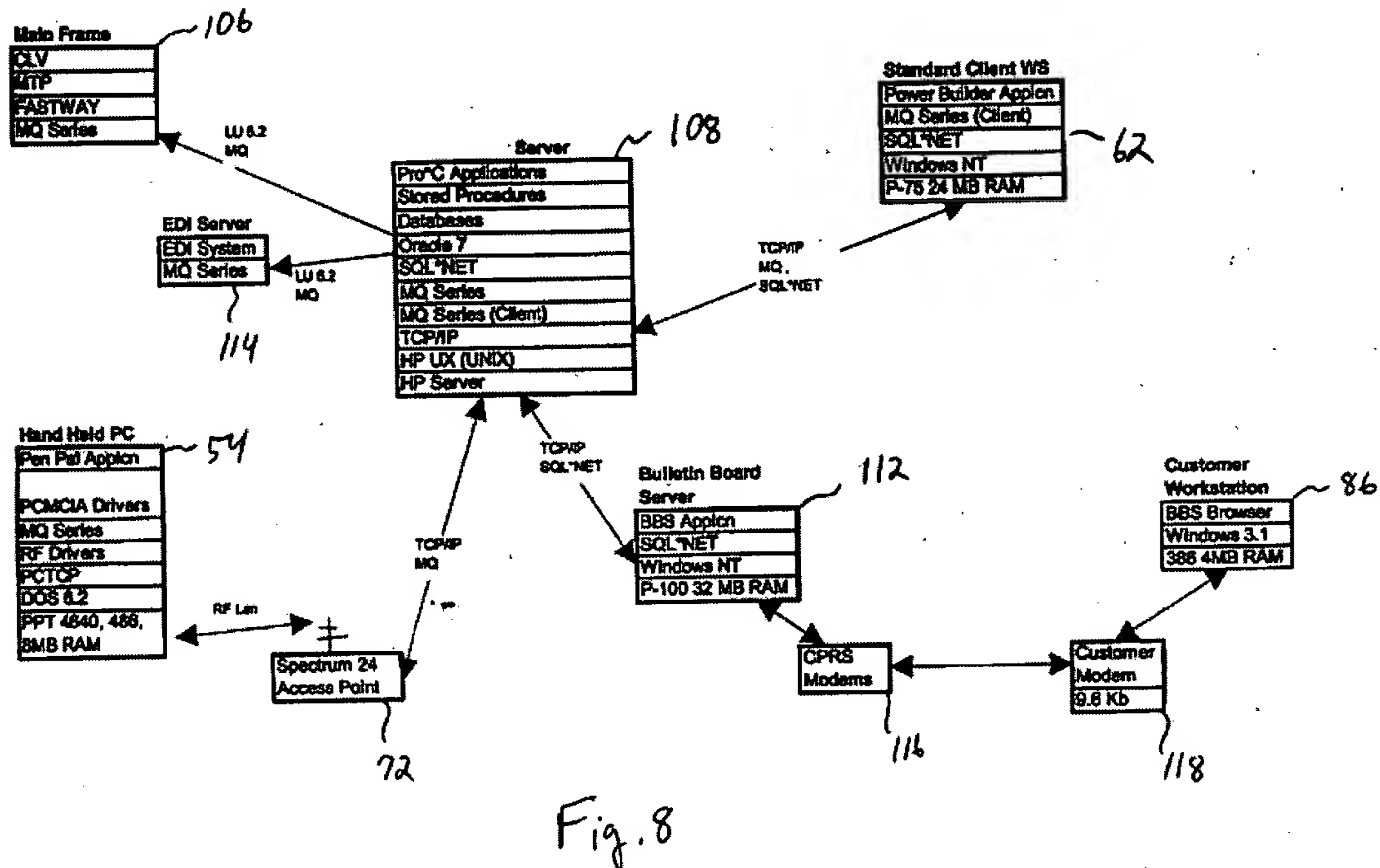


Figure 3

The server (identified by reference numeral 108) in Figure 8 of the present application corresponds to the terminal management system. As can be seen from Figure 8, the server is depicted as running UNIX, which is an operating system. Therefore, one of ordinary skill in the art would understand UNIX as possessing the drivers necessary to transfer/receive information through the network interface, as recited by the means-plus-function elements.

Because one of ordinary skill in the art would understand an operating system (such as UNIX) to contain drivers that accomplish the functions recited by the means-plus-function elements in claims 25-28, the requirements of 35 U.S.C. §112, 2<sup>nd</sup> paragraph, are fulfilled. Therefore, the rejection of these claims as being indefinite is improper, and should be reversed.

**I. The Law Applicable Under 35 U.S.C. §103**

MPEP §2142 states the basic applicable law governing obviousness of claimed subject matter:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

**J. Rebuttal of Rejection of Claim 2 Under 35 U.S.C. §103(a)**

Claim 2 was rejected under 35 U.S.C. §103(a) as being obvious in light of *Keillor* and WO 98/39192 (*Nijenhuis*). In formulating the rejection of claim 2, the Examiner admits that *Keillor* does not teach a loading pad, as required by claim 2. However, the Examiner states that *Nijenhuis* discloses a loading pad, and asserts that the combination of *Keillor* and *Nijenhuis* discloses all of the elements of claim 2, and renders claim 2 obvious.

At the outset, Appellants point out that claim 2 depends from claim 1, and is therefore patentable for at least the same reasons that claim 1 is patentable. Claim 2 is also patentable for the additional reason set forth below.

Claim 2 requires each terminal to include a track, and further requires a "loading pad crossing the track." As just mentioned, the Examiner acknowledges that *Keillor* does not teach a



loading pad at all. *Nijenhuis*, on the other hand, does teach a loading pad, but does not teach a loading pad “crossing the track.” The loading pad disclosed by *Nijenhuis* is depicted in Figure 1, which is reproduced herein as Figure 4.

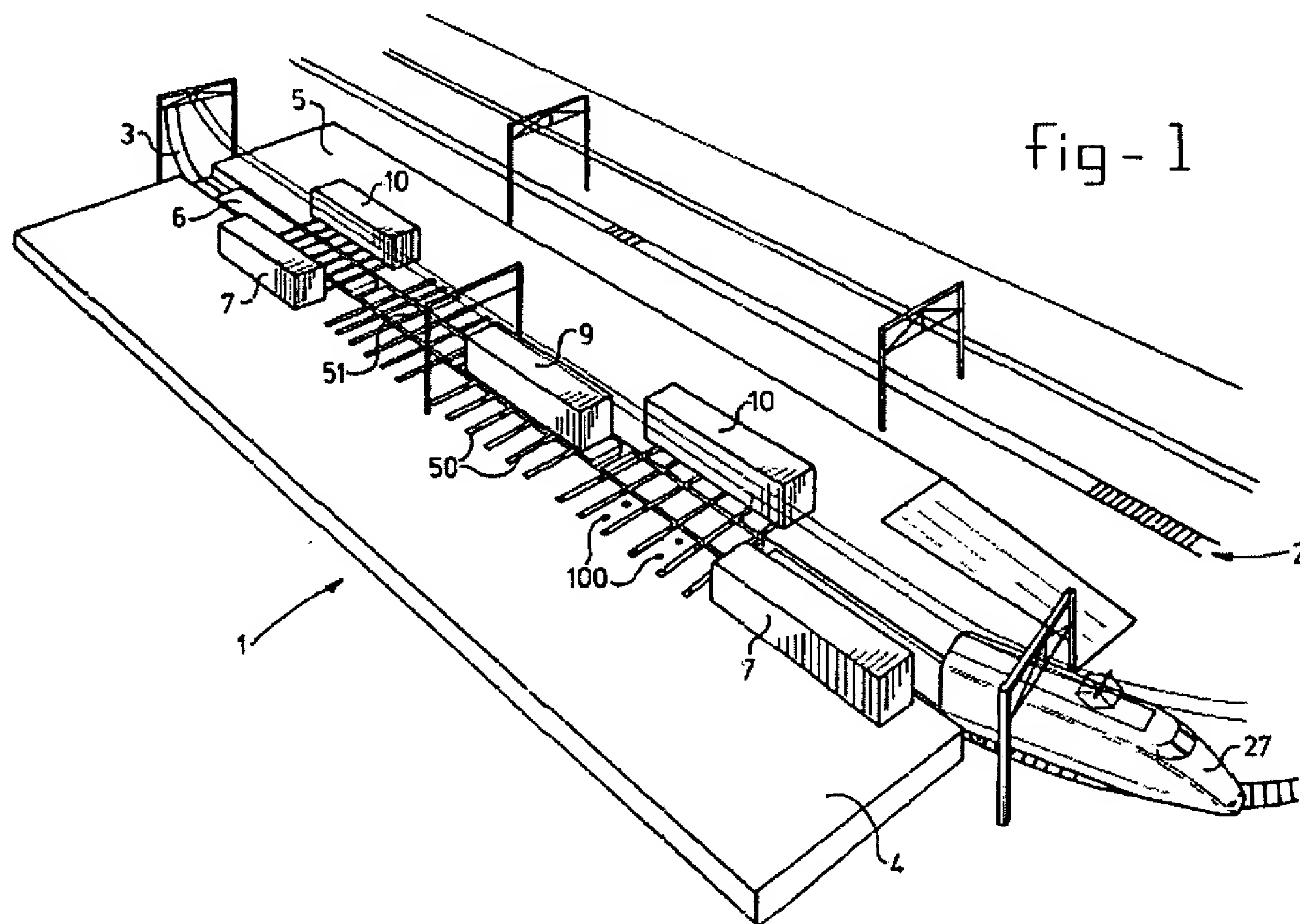


Figure 4

As can be seen from Figure 1 of *Nijenhuis*, the loading pad (identified by reference numeral 4) is elevated relative to the track (identified by reference numeral 3). Thus, containers may be lowered from the loading pad into the railcars (identified by reference numeral 6).

Notably, the loading pad runs along the side of the track, and does not cross the track, as required by claim 2. Appellants go on to point out that *Nijenhuis* does not contain even so much as a

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suggestion to modify the loading pad to cross the track. Further, the record contains no evidence that one of ordinary skill in the art would be motivated to modify the loading pad of *Nijenhuis* to cross the track. Accordingly, rejection of claim 2 under 35 U.S.C. §103(a), as being obvious in view of *Keillor* and *Nijenhuis* is improper, because such a combination does not result in a “loading pad crossing the track,” as required by claim 2.

**K. Rebuttal of Rejection of Claims 3 and 10 under 35 U.S.C. §103(a)**

Claims 3 and 10 were rejected under 35 U.S.C. §103(a) as being obvious in view of *Keillor* and other information that the Examiner asserts to be well known in the art. In formulating these rejections, the Examiner took Official Notice that certain elements are known in the art. Appellants have traversed the Official Notice, and the Examiner has failed to provide documentary evidence to support his position. Therefore, the rejection should be overturned.

In the initial Office action, claims 3 and 10 were rejected with the aid of Official Notice, as described above. Specifically, the Examiner took Official Notice that the “reservation system” required by claim 3 and the “gate controller” required by claim 10 are well known in the art. Appellants do not agree that the elements as recited in claims 3 and 10 are well known in the art. For this reason, Appellants traversed the Official Notice. In the final Office action, the Examiner refused to produce documentary evidence of either the reservation system required by claim 3 or the gate controller required by claim 10. Instead, the Examiner stated that Appellants’ traversal was inadequate.

The Examiner notes that traversal is a two-step process. First, the Appellant must state his traversal on the record. Second, the Appellant must state why the Official Notice statements are not well known in the art. The Examiner cites 37 CFR 1.111(b) in support of the second required step. It is the second step that the Examiner finds lacking in Appellants' traversal.

Appellants point out that when taking Official Notice that an element is known in the art, the Examiner is required to state his basis for such reasoning explicitly. Then, if the applicant wishes to traverse the Official Notice, the applicant may challenge the basis upon which the Examiner founded his Official Notice. This requirement is set forth in MPEP §2144.03:

If such notice is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made.

(Internal citations omitted).

Appellants point out that the Examiner has stated no basis for finding that reservation systems and gate controllers are known in the art. Instead, the Examiner has presented Appellants with a conclusion of common knowledge without explaining the basis upon which the Examiner arrived at such conclusion. For example, with respect to the reservation system required by claim 3, the Examiner merely states "The Examiner takes Official Notice that reservation systems for tractor-trailers are old and well known in the art." The Examiner acts in

the same manner with respect to the gate controller required by claim 10, stating “The Examiner takes Official Notice that gates and gate controllers are old and well known in the art.”

Appellants argue that where the Examiner has failed to state his reasoning upon which his Official Notice is based, Appellants properly traverse the Official Notice by stating their disagreement with the Official Notice. 37 CFR 1.111(b) does not require anything more. It merely requires that the applicant “point out the supposed errors in the examiner’s action.” It does not require the Appellants to form a hypothesis as to why the Examiner believes an element to be well known, so that the Appellants may then strike down the hypothesis. 37 CFR 1.111(b) merely requires an applicant to point out a supposed error in the examiner’s action. In this case, Appellants have done exactly what is required of them. In forming his rejection of claims 3 and 10, the Examiner has proceeded on the premise that reservation systems and gate controllers are well known in the art. By traversing the Official Notice, Appellants point to the Examiner’s error: the premise is incorrect. Where the Examiner refuses to state his reasoning, an applicant can do no better, and 37 CFR 1.111(b) requires no more.

Because the Examiner has failed to provide documentary evidence in support of his Official Notice, the rejection of claim 3 and 10 should be overturned. See MPEP §2144.03 (“If applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.”).

Appellants further point out that claims 3 and 10 depend from claim 1. Therefore, by virtue of their dependency on claim 1, claims 3 and 10 are also patentable for at least the same reasons that claim 1 is patentable.

**L. Appellants as Lexicographer**

In the Initial Office action, the Examiner required Appellants to affirmatively state whether they acted as their own lexicographer in crafting any terms found in the claims. See Initial Office action, page 7. Appellants take this opportunity to object to this practice.

Appellants note that this request comes prior to a conflict arising over the meaning of any of the terms, and would send the prosecution of this application down a lengthy path in the name of settling hypothetical arguments unrelated to patentability of the present application. For example, for the term “computer,” the Examiner has stated that he intends to apply the following definition: “any machine that does three things: accept structured input, process it according to prescribed rules, and produces the result as output.” Perhaps Appellants consider this definition too broad.<sup>2</sup> However, since Appellants agree that one of ordinary skill in the art would understand the central station disclosed in *Keillor* as including a computer to receive communication signals, the issue is moot in the context of this prosecution. In short, nothing turns on the definition of the word “computer.”

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<sup>2</sup> Appellants take no position whether they, in fact, believe the aforementioned definition of “computer” too broad. The present objection to the aforementioned definition is advanced for the sake of argument only.

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If Appellants engaged the Examiner in a dispute over the meaning of the term "computer," prosecution would drag on for the sake of defining a term that both parties agree is found in the prior art, regardless of which definition prevails. Therefore, Appellants refuse to engage in such a dispute, and assert that it is not the practice of the United States Patent and Trademark Office to protract prosecution for the sake of settling theoretical arguments.

By their silence on the matter of lexicography, Appellants have not and do not acquiesce in any of the definitions put forward by the Examiner. Appellants reserve the right to state that they have acted as their own lexicographer, should patentability of the present application turn on the issue.

Respectfully submitted,

DOUGLAS J. MILLER ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402

Date 8 March 2005

By

Nicholas P. Johns  
Nicholas P. Johns  
Reg. No. 48,995

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8<sup>TH</sup> day of March, 2005.

PATRICIA A. HULTMAN  
Name

[Signature]  
Signature

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**APPENDIX I**

**THE CLAIMS ON APPEAL**

1. (Original) A trailer transport system for tracking trains having a plurality of rail cars, wherein each rail car can transport a trailer, the system comprising:  
  
a computer system having a trailer tracking program, wherein the trailer tracking program receives information regarding a trailer to be transported and stores the information in a record;  
  
and  
  
a plurality of terminals, wherein each terminal includes a terminal management system communicatively connected to the computer system, wherein the terminal management system pulls up the record corresponding to the trailer to be transported when the trailer arrives at the terminal and modifies the record to reflect the trailer's transportation status.
2. (Original) The system according to claim 1, wherein each terminal includes a track and a loading pad crossing the track to facilitate rapid loading and unloading of trailers from the train.
3. (Original) The system according to claim 1, wherein the computer system includes a reservation system for reserving a slot on a train, wherein the reservation system operates in conjunction with the trailer tracking program to ensure that a trailer to be transported is placed on its assigned train.
4. (Original) The system according to claim 1, wherein the terminal management system includes a trailer tracking system connected to the computer system over a network.

5. (Previously Presented) The system according to claim 4, wherein the trailer tracking system includes a terminal interface coupled to the network.
6. (Original) The system according to claim 4, wherein the computer system includes a network and wherein the trailer tracking system includes a terminal interface coupled to the network and a hand held computer unit wirelessly coupled to the terminal interface.
7. (Original) The system according to claim 4, wherein the trailer tracking system comprises a portable computer.
8. (Original) The system according to claim 1, wherein the terminal management system includes a trailer tracking device, wherein the trailer tracking device is a handheld computer connected to the computer system over a wireless communications channel.
9. (Original) The system according to claim 1, wherein the terminal management system includes an access restriction system.
10. (Original) The system according to claim 6, wherein the access restriction system includes a gate and a gate controller, wherein the gate controller operates in conjunction with the computer system to restrict access to the terminal.
11. (Cancelled)
12. (Original) In a trailer transport system having a computer system and a plurality of terminals, including a first and a second terminal, a system for tracking movement of a trailer, comprising:



a network;

a computer system communicatively coupled to the network, wherein the computer system includes a data storage system used to store information identifying the trailer;

a first terminal management system associated with the first terminal, wherein the first terminal management system is communicatively coupled to the network and communicates through the network to the computer system; and

a second terminal management system associated with the second terminal, wherein the second terminal management system is communicatively coupled to the network and communicates through the network to the computer system;

wherein each terminal management system tracks arrivals and departures of trailers from the terminal and modifies the information stored in the data storage system as a function of said arrivals and departures.

13. (Original) The trailer transport system of claim 12, wherein the network comprises a token ring network.

14. (Original) The trailer transport system of claim 12, wherein the terminal management system comprises an access restriction system.

15. (Original) The trailer transport system of claim 14, wherein the access restriction system comprises an access controller coupled to an access server, wherein the access server is coupled to the network.

16. (Original) In a trailer transport system having a computer system and a plurality of terminals, including a first and a second terminal, a system for tracking movement of a trailer, comprising:

a network;

a computer system communicatively coupled to the network, wherein the computer system includes a data storage system used to store information identifying the trailer;

a first access restriction system associated with the first terminal, wherein the first access restriction system is communicatively coupled to the network and communicates through the network to the computer system;

a second access restriction system associated with the second terminal, wherein the second access restriction system is communicatively coupled to the network and communicates through the network to the computer system; and

wherein each access restriction system tracks arrivals and departures of trailers from the terminal and modifies the information stored in the data storage system as a function of said arrivals and departures.

17. (Original) The trailer transport system of claim 16, wherein the network comprises a token ring network.

18. (Original) The trailer transport system of claim 16, wherein the access restriction system comprises an access controller coupled to an access server, wherein the access server is coupled to the network.

19. (Original) The trailer transport system of claim 16, wherein the computer system includes a web server connected through a firewall to the network, wherein the web server is used by trucking companies to reserve a slot on a selected train.

20. (Original) The trailer transport system of claim 16, wherein the computer system includes a web server connected through a firewall to the network, wherein the web server is used by trucking companies to enter trailer information to be stored to the data storage system.

21. (Original) The trailer transport system of claim 16, wherein the computer system comprises a main frame and an application server, wherein the mainframe and the application server are communicatively coupled to the network.

22. (Original) The trailer transport system of claim 16, wherein the access restriction system comprises a hand held computer unit wirelessly coupled to the network.

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) In a trailer transport system having a computer system and a plurality of terminals, including a first and a second terminal, wherein the computer system includes a data storage system used to store information identifying trailers being transported, a terminal management system, comprising:

a network interface;

a terminal management computer communicatively coupled to the network interface,

wherein the terminal management computer includes:

means for transferring information about trailers being transported through the network interface to the computer system; and

means for receiving information about trailers being transported from the computer system through the network interface.

26. (Previously Presented) In a trailer transport system having a computer system and a plurality of terminals, including a first and a second terminal, wherein the computer system includes a data storage system used to store information identifying trailers being transported, a terminal management system, comprising:

a network interface;

an access restriction system;

a terminal management computer communicatively coupled to the network interface and to the access restriction system, wherein the terminal management computer includes:  
means for transferring information about trailers being transported through the network interface to the computer system;  
means for receiving information about trailers being transported from the computer system through the network interface.

27. (Previously Presented) The trailer transport system of claim 26, wherein the access restriction system comprises a hand held computer unit wirelessly coupled to the network.

28. (Previously Presented) The system according to claim 26, wherein the access restriction system includes a gate and a gate controller, wherein the gate controller operates in conjunction with the computer system to restrict access to the terminal.

**Appeal Brief Under 37 CFR 41.37**

Serial No.: 09/579,918

Filed: May 26, 2000

Title: SYSTEM AND METHOD FOR RAIL TRANSPORT OF TRAILERS

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Docket No.: 1126.001US1

**EVIDENCE APPENDIX**

None.

Appeal Brief Under 37 CFR 41.37

Serial No.: 09/579,918

Filed: May 26, 2000

Title: SYSTEM AND METHOD FOR RAIL TRANSPORT OF TRAILERS

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Docket No.: 1126.001US1

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**RELATED PROCEEDINGS APPENDIX**

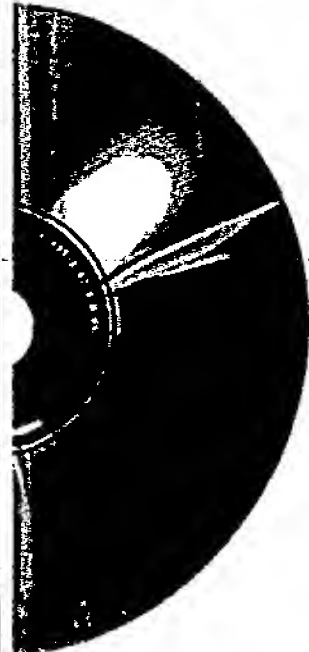
None.

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For example, in order to migrate an application from one UNIX system to another, all the system software components (DBMSs, TP monitors, compilers, etc.) that are currently linked to that application must also be available for the new system. Otherwise, custom conversion programs must be developed and more conversion effort is required.

The goal of open systems is a beautiful one, very much akin to world peace. Everyone pledges allegiance to it, but getting there seems to take forever.

Increasingly, the term also refers to the Wintel PC. Technically, the PC is an open architecture, not an open system, since Intel and Microsoft control the primary hardware and software standards. However, countless third-party vendors have been encouraged to write software for the platform as well as make hardware add-ons and interoperable products, which is why the PC became the largest segment of the computer industry.

Many in the industry also use the term to refer to everything other than proprietary IBM S/390, AS/400 and RS/6000 environments. Contrast with *closed system*. See *OSI*, *Open Group* and *X/Open*.

**Open Transport** The subsystem in the Macintosh operating system that implements AppleTalk, TCP/IP and serial communications protocols. Macintosh developers creating network applications interact with the network by writing to the same Open Transport programming interface (API), regardless of the underlying transport mechanism. Open Transport is a superset of X/Open's Transport Interface.

**OpenType** A font technology from Microsoft and Adobe that is an extension to the TrueType format with support for Type 1 fonts, which it contains within a TrueType wrapper. It provides more support for glyphs and ligatures than previous formats and is expected to ease cross-platform operations between Windows and the Mac. Like TrueType fonts, OpenType fonts use only one font file rather than two as with Type 1 fonts. OpenType is also unicode based.

**OpenView** Network management software from HP. It supports SNMP and CMIP protocols, and third-party products that run under OpenView support SNA and DECnet network management protocols. OpenView is an enterprise-wide network management solution.

**OpenVME** An operating system from ICL that was introduced in 1994 for its Series 39 mainframes and carried forth on its Trimetra systems. OpenVME is the open systems version of the VME operating system, which includes all the open interfaces previously available as an option. In late 1992, VME had already achieved XPG4 branding for its conformance to open systems standards. See *VME*.

**OpenVMS** A later version of the VMS operating system from Digital that is POSIX and XPG3-compliant and runs on VAX and Alpha systems.

**Opera** A Web browser for Windows, EPOC, BeOs and Linux from Opera Software, Oslo, Norway, ([www.opera.com](http://www.opera.com)). Developed at Telenor (Norwegian Telecom) in 1994 and commercialized by Opera in 1995, it is noted for its unique features, including fast rendering of Web pages and built-in zoom. Opera can display multiple windows with only one instance of the program running, which allows for example, a Web page with many links to be kept in view in one window while retrieving the linked pages in another. Opera can import bookmarks from Netscape and Internet Explorer.

**operand** The part of a machine instruction that references data or a peripheral device. In the instruction, **ADD A to B**, A and B are the operands (nouns), and **ADD** is the operation code (verb). In the instruction **READ TRACK 9, SECTOR 32**, track and sector are the operands.

**operating system** The master control program that runs the computer. The first program loaded when the computer is turned on, its main part, the "kernel," resides in memory at all times. The operating system sets the standards for all application programs that run in the computer. The applications "talk to" the operating system for all user interface and file management operations. Also called an "executive" or "supervisor," an operating system performs the following functions.

**User Interface** All graphics based today, the user interface includes the windows, menus and method of interaction between you and the computer. Prior to the Mac, Windows and Motif (UNIX) interfaces, all interaction was based on commands entered by the user. Operating systems may support optional interfaces and allow a new shell, or skin, to be used instead.

**Job Management** Job management controls the order and time in which programs are run and is more sophisticated in the mainframe environment where scheduling the daily work has always been routine. IBM's job control language (JCL) was developed decades ago. In a desktop environment, batch files can be written to perform a sequence of operations that can be scheduled to start at a given time.

**Task Management** Multitasking, which is the ability to simultaneously execute multiple programs, is available in all operating systems today. Critical in the mainframe and large server environment, applications can be prioritized to run faster or slower depending on their purpose. In the desktop world, multitasking is necessary just for keeping several applications open at the same time so you can bounce back and forth between them. See *multitasking*.

**Data Management** Data management keeps track of the data on disk, tape and optical storage devices. The application program deals with data by file name and a particular location within the file. The operating system's file system knows where that data is physically stored (which sectors on disk) and interaction between the application and operating system is through the programming interface. Whenever an application needs to read or write data, it makes a call to the operating system (see *API*).

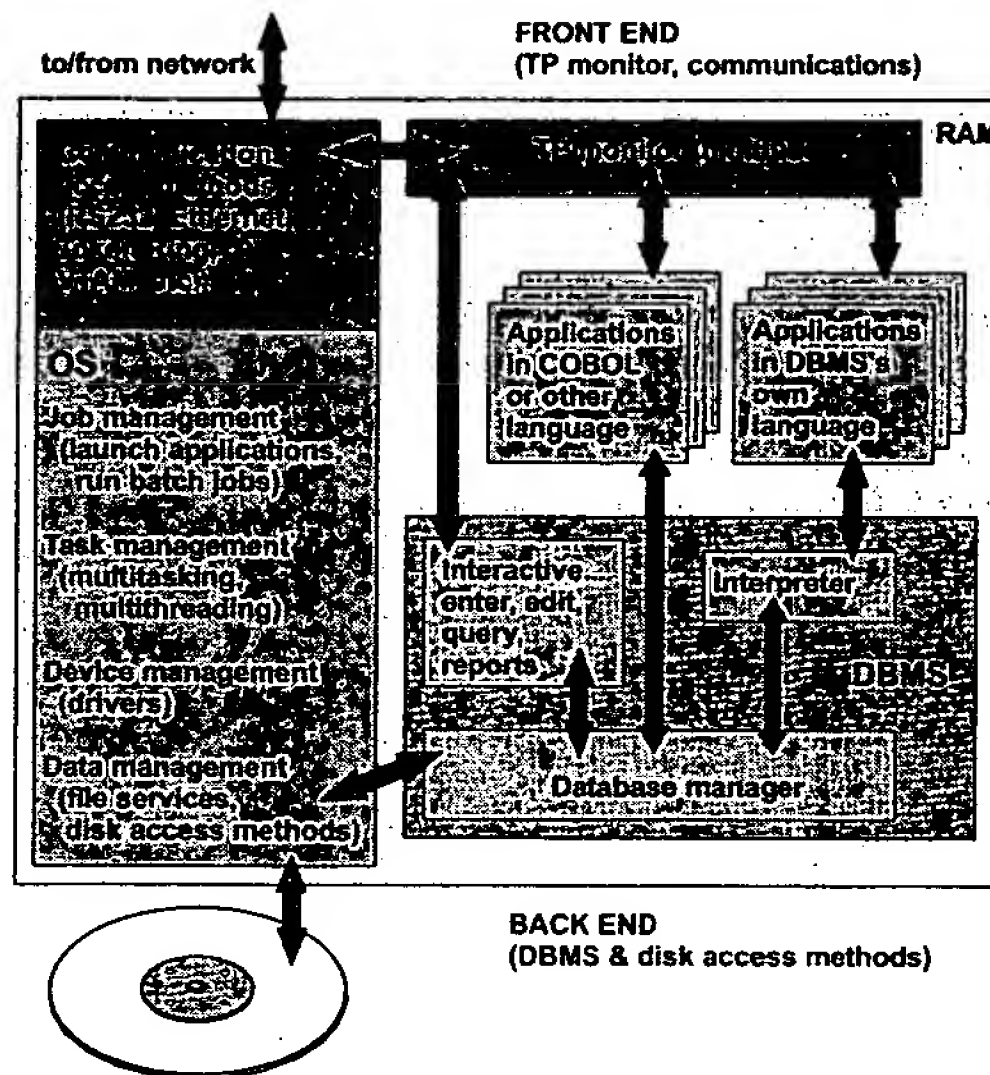
**Device Management** Device management controls peripheral devices by sending them commands in their own proprietary language. The software routine that knows how to deal with each device is called a "driver." The operating system contains all the drivers for the peripherals attached to the computer. When a new peripheral is added, that device's driver is installed into the operating system. See *driver*.

**Security** Multiuser operating systems provide password protection to keep unauthorized users out of the system. Large operating systems also maintain activity logs and accounting of the user's time for billing purposes. They also provide backup and recovery routines for starting over in the event of a system failure.

**History** The earliest operating systems were developed in the late 1950s to manage tape storage, but programmers mostly wrote their own I/O routines. In the mid-1960s, operating systems became essential to manage disks, complex timesharing and multitasking systems.

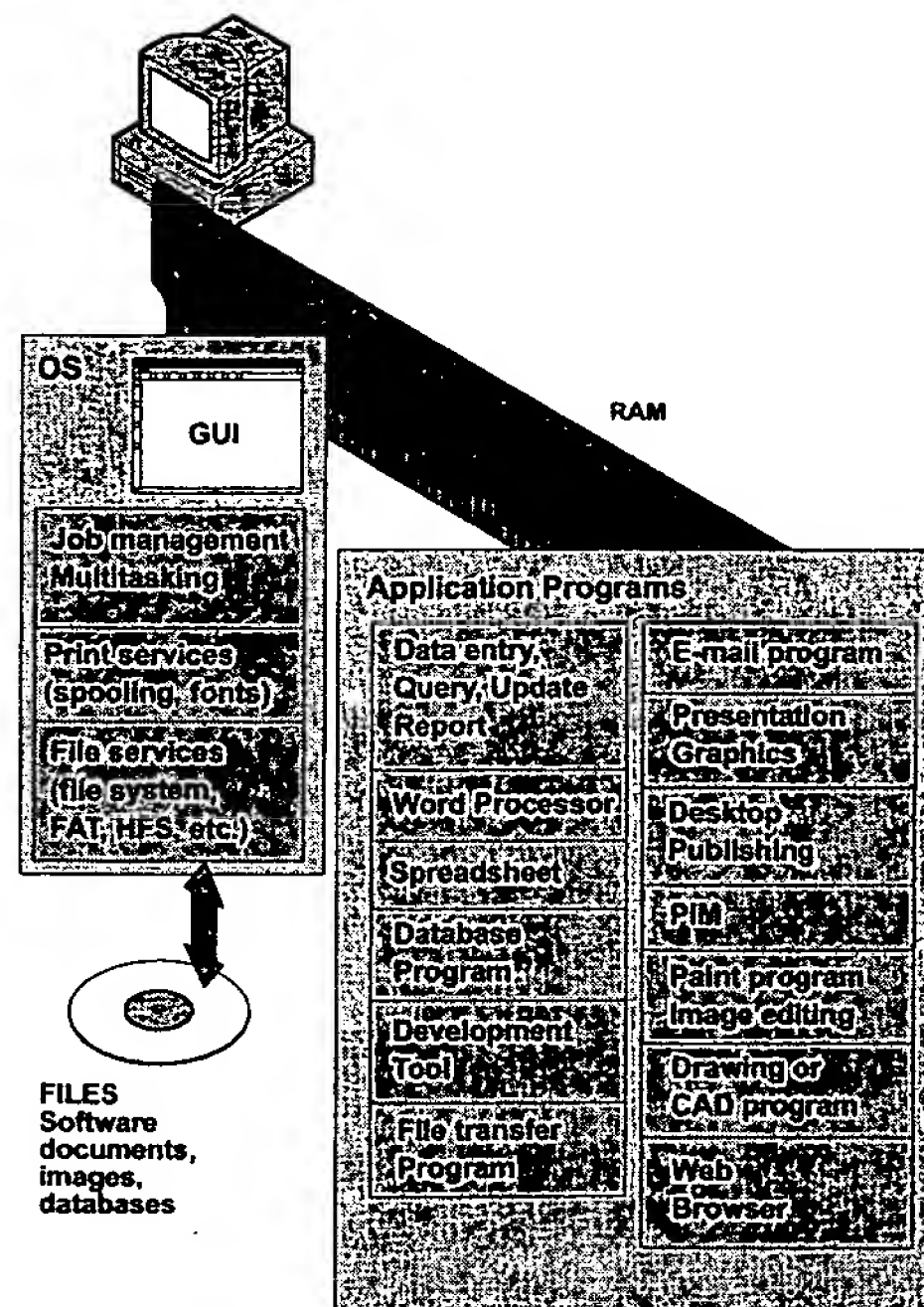
Today, all multipurpose computers from micro to mainframe use an operating system. Special-purpose devices (appliances, games, toys, etc.) generally do not. They usually employ a single program that performs all the required I/O and processing tasks.

**Common Operating Systems** The primary operating systems in use are the many versions of Windows (95, 98, NT, ME, 2000, XP), the many versions of UNIX (Solaris, Linux, etc.), the Macintosh OS, IBM mainframe OS/390 and the AS/400's OS/400. DOS is still used for some applications, and there are other special-purpose operating systems.



#### System and Application Software

This diagram shows how the major system software interacts with applications in memory. System software comprises the programs that support the running of applications (operating system, DBMS, TP monitor and access methods).



#### Operating System and Application Software

This diagram shows the components of the operating system and typical application programs that run in a desktop computer.